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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/840,052	05/06/2004	Harry C. Morris	DMBC-0007	6640

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EXAMINER

ZIMMERMAN, JOHN J

ART UNIT	PAPER NUMBER
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1775

DATE MAILED: 05/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/840,052	MORRIS, HARRY C.	
	Examiner	Art Unit	
	John J. Zimmerman	1775	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 March 2005.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3-10 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 3-10 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 06 May 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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SECOND OFFICE ACTION

Amendments

1. The Reply under 37 C.F.R. 1.111 received March 17, 2005 has been entered. Claims 3-10 are pending in this application.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 5-8 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Hough (U.S. Patent 3,974,564).
4. Hough discloses coating a beveled (e.g. see Figures 2 and 4) or square (e.g. see Figure 3 - before grinding) carbon steel blade (e.g. see column 2, lines 13-17) with a hard coating of 60-75 Rockwell C (e.g. see claim 4). Case hardening involves heat treating. Regarding the recitation in the claims that the blade is a coater blade or doctor blade for applying inks and coating to

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paper and packaging, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. The individual blades of Hough are certainly capable of applying inks and coatings to paper although these are not the intended uses for the blades of Hough. See *In re Casey*, 370 F.2d 576, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 312 F.2d 937, 939, 136 USPQ 458, 459 (CCPA 1963). In addition, the recitation of intended use for the blade has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

5. Claims 5-8 and 10 are rejected under 35 U.S.C. 102(a) as being anticipated by White (U.S. Patent 6,633,739).

6. White discloses a beveled (e.g. see Figure 6; claim 4) or square blade (e.g. see Figure 6; claim 5) carbon steel or stainless steel blade (e.g. see column 1, lines 22-44; claim 2) with a hard coating of up to 80 Rockwell C (e.g. see column 1, lines 22-29; column 4, lines 64-68) and a thickness of 0.1-4 microns (e.g. see claim 1) disposed on the blade at elevated heating temperatures (e.g. see column 4, lines 36-64). Regarding the recitation in the claims that the

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blade is a coater blade or doctor blade for applying inks and coating to paper and packaging, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. The blade of White is certainly capable of applying inks and coatings to paper. See *In re Casey*, 370 F.2d 576, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 312 F.2d 937, 939, 136 USPQ 458, 459 (CCPA 1963). In addition, the recitation of intended use for the blade has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

7. Claims 5, 8 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Jones (U.S. Patent 3,944,443).

8. Jones discloses coating steel blades (e.g. T-1 tool steel; see column 4, line 18) with a hard coating of up to 80 Rockwell C (e.g. see claim 2). Regarding the recitation in the claims that the blade is a coater blade or doctor blade for applying inks and coating to paper and packaging, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed

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invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. The individual blades of Jones are certainly capable of applying inks and coatings to paper although these are not the intended uses for the blades of Jones. See *In re Casey*, 370 F.2d 576, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 312 F.2d 937, 939, 136 USPQ 458, 459 (CCPA 1963). In addition, the recitation of intended use for the blade has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951). Regarding the recitation of heat treating in the product claims, when there is a substantially similar product, as in the applied prior art, the burden of proof is shifted to the applicant to establish that their product is patentably distinct not the examiner to show that the same process of making, see *In re Brown*, 173 U.S.P.Q. 685, and *In re Fessmann*, 180 U.S.P.Q. 324.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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10. Claims 3-8 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lindblad (U.S. Patent 4,970,560).

11. Lindblad discloses plating a carbon steel blade with nickel-phosphorus of a thickness of about 5 microns and then heat treating to increase hardness of the coating to a hardness of 68-70 Rc (e.g. column 4, lines 33-49). The use of beveled blades (e.g. column 2, line 53) and square blades (e.g. see Figure 2) are shown by Lindblad to be obvious alternative in the art depending on the particular use of the blade. Lindblad may differ from the claims in that Lindblad may not require a Rockwell C hardness of "greater than 70" (e.g. claim 10, lines 8-9; claim 8, line 8), but the difference between Lindblad's hardness of 70 Rc and applicant's claimed "greater than 70" Rc is so minor that *prima facie* one of ordinary skill in the art would expect the coated blades to essentially be the same. There is no patentable distinction between the blades of Lindblad and the blades claimed by applicant. Regarding claim 3's recitation of "electroless" nickel, when there is a substantially similar product, as in the applied prior art, the burden of proof is shifted to the applicant to establish that their product is patentably distinct not the examiner to show that the same process of making, see *In re Brown*, 173 U.S.P.Q. 685, and *In re Fessmann*, 180 U.S.P.Q. 324. Regarding the recitation in the claims that the blade is a coater blade or doctor blade for applying inks and coating to paper and packaging, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. The blade of Lindblad is certainly capable of applying inks and coatings to paper. See *In re Casey*, 370 F.2d 576, 152

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USPQ 235 (CCPA 1967) and *In re Otto*, 312 F.2d 937, 939, 136 USPQ 458, 459 (CCPA 1963).

In addition, the recitation of intended use for the blade has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

12. Claims 3 and 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lindblad (U.S. Patent 4,970,560) as applied to claims 3-8 and 10 above, and further in view of Calnan (U.S. Patent 3,490,314).

13. Lindblad may differ from claims 3 and 9 in that Lindblad's nickel-phosphorus coating may be electrodeposited (e.g. see column 4, lines 33-36). Calnan, however, clearly discloses that hard nickel-phosphorus coatings on blades can be deposited either electrolytically or electrolessly (e.g. column 2, lines 19-28). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use either electroplating or electroless plating to apply the nickel-phosphorus coatings to the blades of Lindblad because Calnan shows that either process can be used.

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14. Claims 5-8 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jones (U.S. Patent 3,944,443).

15. Jones discloses coating steel blades (e.g. T-1 tool steel; see column 4, line 18) with a hard coating of up to 80 Rockwell C (e.g. see claim 2). Jones differs from claims 6 and 7 in that Jones may not specify using beveled or square edge blades. Jones, however, does disclose that his process can be used on blades of "various shapes" (e.g. see column 3, lines 59-64). The examiner notes that standard blades in the art are typically beveled (e.g. razor blades, knives, etc. . .) or square edged (e.g. some doctor blades, wipers, etc. . .). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the process of Jones to beveled or square edged blades because these are standard blade shapes in the art and Jones specifically discloses that his process can be used on blades of various shapes.

16. Claims 3-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Calnan (U.S. Patent 3,490,314).

17. Calnan discloses plating a low carbon steel blade or stainless steel blade (e.g. column 2, lines 5-11) with nickel-phosphorus of a thickness of up to 0.005 inch (e.g. see column 2, lines 65-69) and then heat treating to increase hardness of the coating (e.g. column 3, lines 4-15). The use of beveled blades is disclosed (e.g. honing - column 3, lines 16-19), but the examiner notes that square edge blades are also typically used in the art. Calnan may differ from the claims in that Calnan may not disclose the Rockwell C hardness of the nickel-phosphorus layer after heat

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treating, but Calnan does disclose that heat treating can be done to maximum hardness (e.g. column 3, lines 4-15). In view of the fact that Calnan heat treats his nickel-phosphorus coatings to maximum hardness, and applicant uses the same coating composition, it must be assumed that the hardness results would be the same as applicant's results. Trademark Office can require applicants to prove that prior art products do not necessarily or inherently possess characteristics of claimed products where claimed and prior art products are identical or substantially identical, or are produced by identical or substantially identical processes; burden of proof is on applicants where rejection based on inherency under 35 U.S.C. 102 or on prima facie obviousness under 35 U.S.C. 103, jointly or alternatively, and Patent and Trademark Office's inability to manufacture products or to obtain and compare prior art products evidences fairness of this rejection, *In re Best, Bolton, and Shaw*, 195 USPQ 431 (CCPA 1977). Regarding the recitation in the claims that the blade is a coater blade or doctor blade for applying inks and coating to paper and packaging, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. The blades of Calnan are certainly capable of applying inks and coatings to paper. See *In re Casey*, 370 F.2d 576, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 312 F.2d 937, 939, 136 USPQ 458, 459 (CCPA 1963). In addition, the recitation of intended use for the blade has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or

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structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

Response to Arguments

18. Applicant's arguments filed March 17, 2005 have been fully considered but they are not persuasive.

19. Regarding the rejection of the claims under 35 U.S.C. 102(b) as being anticipated by Hough (U.S. Patent 3,974,564), applicant argues that Hough is not a coater blade or doctor blade for applying inks and coating to paper and packaging. The examiner notes, however, that a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. The individual blades of Hough are certainly capable of applying inks and coatings to paper although these are not the intended uses for the blades of Hough. See *In re Casey*, 370 F.2d 576, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 312 F.2d 937, 939, 136 USPQ 458, 459 (CCPA 1963). In addition, the recitation of intended use for the blade has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150,

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152, 88 USPQ 478, 481 (CCPA 1951). Although applicant argues that the blades of Hough are not capable of being used as coater or doctor blades, no rationale was provided for this assertion. The blades of Hough have the same configurations shown in applicant's figures and therefore would be able to perform the same functions.

20. Regarding the rejection of the claims under 35 U.S.C. 102(a) as being anticipated by White (U.S. Patent 6,633,739), applicant argues that White does not constitute prior art because White was filed after the priority date of the instant application. The examiner notes, however, that the subject matter of the pending claims only have priority as the filing date of this pending application (May 6, 2004). When a pending claim contains *any* limitation (e.g. Rockwell C hardness of greater than 70) which cannot be found in a parent application, then the priority for that claim ends with the last continuous uninterrupted line of support. Therefore White is available as prior art.

21. Regarding the rejection of the claims under 35 U.S.C. 102(b) as being anticipated by Jones (U.S. Patent 3,944,443), applicant argues that the "hardened surface of Jones is not a separate protective layer applied first to the substrate, but rather results from treating the metal substrate itself". The examiner notes that Jones clearly shows that a protective thin layer of hard boron nitride is formed on the blade surfaces (e.g. see column 4, lines 16-20) and that the pending claims do not prohibit application of the protective layer through reaction with the blade substrate. Arguments which are not commensurate with the claim limitations are not convincing. Regarding the recitation of heat treating in the product claims, when there is a substantially

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similar product, as in the applied prior art, the burden of proof is shifted to the applicant to establish that their product is patentably distinct not the examiner to show that the same process of making, see *In re Brown*, 173 U.S.P.Q. 685, and *In re Fessmann*, 180 U.S.P.Q. 324.

22. Regarding the rejection of the claims under 35 U.S.C. 103(a) as being unpatentable over Lindblad (U.S. Patent 4,970,560), applicant argues that Lindblad is not a coater blade or doctor blade for applying inks and coating to paper and packaging. The examiner notes, however, that a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. The blade of Lindblad is certainly capable of applying inks and coatings to paper. See *In re Casey*, 370 F.2d 576, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 312 F.2d 937, 939, 136 USPQ 458, 459 (CCPA 1963). In addition, the recitation of intended use for the blade has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

23. Regarding the rejection of the claims under 35 U.S.C. 103(a) as being unpatentable over Jones (U.S. Patent 3,944,443), Jones clearly shows that a protective thin layer of hard boron

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nitride is formed on the blade surfaces (e.g. see column 4, lines 16-20), and contrary to applicant's arguments, the pending claims do not prohibit application of the protective layer through reaction with the blade substrate.

24. Regarding the rejection of the claims under 35 U.S.C. 103(a) as being unpatentable over Calnan (U.S. Patent 3,490,314), applicant argues that Calnan's blade is not a coater blade or doctor blade for applying inks and coating to paper and packaging. The examiner notes, however, that a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. The blades of Calnan are certainly capable of applying inks and coatings to paper. See *In re Casey*, 370 F.2d 576, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 312 F.2d 937, 939, 136 USPQ 458, 459 (CCPA 1963). In addition, the recitation of intended use for the blade has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

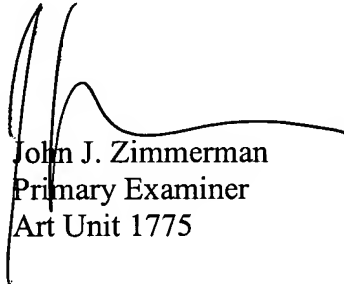
Conclusion

25. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

26. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John J. Zimmerman whose telephone number is (571) 272-1547. The examiner can normally be reached on 8:30am-5:00pm, M-F. Supervisor Deborah Jones can be reached on (571) 272-1535. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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27. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



John J. Zimmerman
Primary Examiner
Art Unit 1775

jjz
May 20, 2005